

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Cancel claims 1-4.

5. (previously presented) A queuing system comprising:
a plurality of interconnected directors, each one of the directors having an inbound queue and an outbound queue, each one of such directors comprising:
a data pipe section having, an input/output interface memory, for a
input/output interface section receiving data information from a source thereof and for
returning information data to such source; and,
a microprocessor for controlling the data pipe section in accordance with
processing information sent thereto from a remote one of the directors, such each one
of the microprocessors having a CPU and a CPU memory, such CPU memory having
thereon the inbound one of the inbound queue and the outbound storing a queue for
storing inbound information passed to such director for processing therein, such
information being sent to the remote director from an originating one of the directors;
and
wherein each one of the input/output interface memories sections includes- the
outbound one of the inbound queue and outbound queue a queue for outbound
information being returned to the source through such originating one of the directors
after being processed by the microprocessor of such remote one of the directors;
wherein each one of the directors includes a translation table, such table
storing at a location thereof corresponding to each one of the remote directors a
producer index for the queue of such remote director and a consumer index for such

one of the remote directors; and

wherein an index into the table is a function of the receiving information in a queue entry in the queue and derives the location of the source from the table.

Cancel claim 6, 7 and 8.

9. (previously presented) A queuing system comprising:

a plurality of interconnected directors, each one of the directors having an inbound queue and an outbound queue, each one of the directors comprising:

a data pipe section, having an input/output interface memory, for a input/output interface section receiving receiving data information from a source thereof and returning data information to such source; and,

a microprocessor processing for controlling the data pipe section in accordance with information sent thereto from a remote one of the directors, each one of the microprocessors having a CPU and a CPU memory, such CPU memory having therein the inbound one of the inbound queue and the outbound queue for storing a queue for inbound information passed to such director for processing therein such information being sent to the remote director from an originating one of the directors; and

wherein each one of the input/output sections-interface memories includes the outbound one of the inbound queue and outbound queue a queue for outbound information information being returned to the source through such originating one of the directors after being processed by the microprocessor of such remote one of the directors.

10 (withdrawn) A queuing method, comprising:

receiving information) at the I/O interface of an originating director; creating in the originating director a queue entry;

translating in the originating director an address of the queue entry into an address for a remote director using a translation table;

packetizes the queue information for transmission on the packet switching network to the remote director;

updating in the originating director a producer index for the packetized information;

translating the updated producer index in the originating director using the translation table;

packetizing the translated updated producer index; and

writing the translated producer index for an inbound queue of a remote director rather than storing it in the originating director queue.

11. (withdrawn) The queuing method recited in claim 10 wherein:
 - the packet is transmitted to the remote director;
 - the remote director reads information formerly written into by the originating director;
 - the remote director processes the information and updates its consumer index;
 - the updated consumer index is sent to the originating director; and
 - the originating director receives the consumer index from the remote director and translates the index using the translation table and stores the translated consumer index.

12. (new) The systems recited in claim 9 wherein CPU memory has therein only the inbound one of the inbound queue and the outbound queue and wherein each one of the input/output interface memories includes only the outbound one of the inbound queue and outbound queue.